



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,650	07/07/2006	Nobuhiro Tazoe	292536US2PCT	5471

22850 7590 11/20/2009
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

ONEILL, KARIE AMBER

ART UNIT	PAPER NUMBER
----------	--------------

1795

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

11/20/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/585,650	Applicant(s) TAZOE, NOBUHIRO	
	Examiner Karie O'Neill	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 and 11-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10-10-06, 8-20-07, 9-21-07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II, Species I (Claim 10), in the reply filed on September 14, 2009, is acknowledged.

Claims 1-9 and 11-16 have been withdrawn from consideration as being drawn to a non-elected group. Therefore, Claim 10 is pending in this office action.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d) or (f), which papers have been placed of record in the file.

Information Disclosure Statement

3. Information disclosure statements (IDS), submitted October 10, 2006; August 20, 2007; and September 21, 2007, have been received and considered by the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reimers et al. (US 6,416,904 B1) in view of Fukumura et al. (US 6,027,835).

Art Unit: 1795

Reimers et al. discloses in Figures 1 and 2, a manufacturing method for producing a cell electrode plate used as lithium ion battery electrodes, comprising a band-like core member, called a web, made of metal foil, such as copper or aluminum foil (column 4, lines 45-51). Reimers et al. discloses a plurality of sheets, called segments, of electrode active material applied discontinuously on and longitudinally on, in segments, at least one of upper and lower surfaces of the core metal foil web (column 3, lines 45-52). Reimers et al. discloses the leading edges and trailing edges of the upper side segment coatings are proximate to the leading edges and trailing edges of the lower side segment coatings to thereby provide sheets of electrode active material on said core metal foil web (column 3, lines 52-55), but does not disclose wherein at least one of the sheets of electrode active material has end positions widthwise of the core member which are different from end positions of the other sheets of electrode active material widthwise of the core member to thereby provide the sheets of electrode active material on said core member.

Fukumura et al. discloses an electrode sheet for use with a non-aqueous secondary cell using lithium as an active material, the active material or electrode depolarizing mix layer being formed on both sides of a current collector, the current collector preferably made of aluminum or copper foil (column 1, lines 32-36 and column 2, lines 60-67). Fukumura et al. discloses in Figures 4A-4C, an electrode depolarizing mix layer (42a) being formed on an upper surface of a current collector (41) and an electrode depolarizing mix layer (42b) being formed on a lower surface of the current collector (41). As compared to the lower electrode depolarizing mix layer (42b), the left

Art Unit: 1795

end LT of the upper electrode depolarizing mix layer (42a) is shifted to the right (toward the center of the electrode sheet), and the right end RT thereof is shifted to the right (toward the right end of the electrode sheet). The cross sections of the electrode sheet at both ends in the longitudinal direction are in translational symmetry with each other. The lengths of the electrode depolarizing mix layers (42a) and (42b) are generally equal (column 4, lines 17-34). That is to say, the electrode active material on the upper surface of the core member has end positions widthwise which are different than end positions of the electrode active material on the lower surface widthwise of the core member. At the time of the invention it would have been obvious to one of ordinary skill in the art to place at least one of the sheets of electrode active material with end portions widthwise of the core member in a different position from the other sheets of electrode active material widthwise of the core member of Reimers et al., because Fukumura et al. teaches forming the electrode sheets in this manner reduces manufacturing trouble such as breakage of the electrode sheet during the manufacture process and supplying an electrode sheet capable of providing improved circularity of a coiled assembly and to provide a high capacity secondary cell (column 1, lines 64-67 and column 2, lines 1-6).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karie O'Neill whose telephone number is (571)272-

Art Unit: 1795

8614. The examiner can normally be reached on Monday through Friday from 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KAO

/Karie O'Neill/
Examiner, Art Unit 1795